

May 19, 2011 CCN 224107

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555 NRC Project #0748

SUBJECT: Contract No. DE-AC07-05ID14517 – Next Generation Nuclear Plant Project - Quality

Assurance Program Description, Revision 3– Nuclear Regulatory Commission

Project #0748

On August 3, 2010, as part of the early licensing phase of the project, the Next Generation Nuclear Plant (NGNP) Project submitted PDD-172, Revision 0, "Next Generation Nuclear Project Quality Assurance Program Description," (QAPD) for Nuclear Regulatory Commission (NRC) staff review and feedback. By letter dated November 10, 2010, the NRC staff provided feedback and identified two items of interest that required clarification. These items of interest were subsequently discussed with the NRC staff via teleconference on January 13, 2011. During the call, NGNP stated that items requiring clarification will be addressed in an upcoming revision to the NGNP Quality Assurance Program Description (QAPD), and that the revision to the NGNP QAPD will incorporate the new quality assurance program description template, currently being developed by the Nuclear Energy Institute (NEI) that incorporates the NRC endorsed ASME NQA-1-2008, 1a-2009, as an acceptable method of meeting 10 CFR Part 50, Appendix B criteria.

The enclosed document, PDD-172, Revision 3, "Next Generation Nuclear Project-Quality Assurance Program Description," addresses the items above and establishes the quality assurance (QA) policy for the NGNP and assigns major functional responsibilities for NGNP activities conducted by or for the NGNP Project. It describes the methods, and establishes Quality Assurance and administrative control requirements, that meet 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants."

The NGNP Project's QA requirements are based on Regulatory Guide 1.28, Rev. 4, June 2010, "Quality Assurance Requirements (Design and Construction)" and on Regulatory Guide 1.33, Rev. 2, February 1978, "Quality Assurance Program Requirements (Operation)." Regulatory Guide 1.28, Rev. 4 states that Part I and Part II requirements of NQA-1-2008, 1a-2009, "Quality Assurance Requirements for Nuclear Facility Applications" provide an adequate basis for complying with the requirements of 10 CFR Part 50, Appendix B, subject to the additions and modifications identified therein. The QAPD is based on the requirements and guidance of ASME NQA-1-2008, 1a-2009, Parts I and II, with specific reference to selected sections of Parts III and IV as identified in the document. The QAPD addresses additions and modifications to the regulatory positions included in Regulatory Guide 1.28, Rev. 4 and the NEI draft template that incorporates the NRC endorsed ASME NQA-1-2008, 1a-2009. Regulatory Guide 1.33, Rev. 2 addresses an older set of standards. Appendix 1 of the NEI template provides a roadmap for identifying how Regulatory Guide 1.33, Rev. 2 requirements are addressed by NQA-1-2008, NQA-1a-2009.

Additionally, the QAPD is applied to NGNP Project activities beginning with technology development and continuing through the design, licensing, operation, construction, pre-operation, operation, and decommissioning phases. It includes all planned and systematic activities necessary to provide

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adequate confidence that the safety-related systems, structures, and components (SSCs) will perform satisfactorily in service. It may also be applied to certain equipment and activities that are not safety-related, support safe plant operations, or where DOE and/or NRC requirements or guidance results in the establishment of additional program requirements.

Throughout the QAPD, the responsibility for establishing and implementing quality assurance program requirements is assigned to the NGNP organization. As the project advances to design, licensing, startup testing and operations, the QAPD will be revised to reflect the transfer of responsibilities to other organizations (e.g., reactor supplier, architect engineering (AE) firm, owner-operator, etc.).

As stated in our earlier submittal, the NGNP Project is requesting a formal NRC review of the enclosed NGNP QAPD and subsequent issuance of a Safety Evaluation Report.

If you have any questions regarding this submittal, please contact me at (208) 526-6063 or James Kinsey, Director, NGNP Regulatory Affairs at (208) 526-6882.

Sincerely,

Greg Gibbs, Project Director

Next Generation Nuclear Plant Project

JK:DP:CN

Enclosure:

1. PDD-172, Revision 3, Next Generation Nuclear Plant Quality Assurance Program Description.

References:

- 1. PDD-172, Revision 0, "Contract No. DDE-AC07-05ID14517-Next Generation Nuclear Plant-Quality Assurance Program Description," CCN 221673, August 3, 2010.
- 2. NRC letter "Next Generation Nuclear Plant-Quality Assurance Program Description Feedback," November 10, 2010.

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